

1989

Science Notes - Recombinant DNA Simulation

Stephanie A. Althof

Follow this and additional works at: <https://scholarworks.uni.edu/istj>



Part of the Science and Mathematics Education Commons

Let us know how access to this document benefits you

Copyright © Copyright 1989 by the Iowa Academy of Science

Recommended Citation

Althof, Stephanie A. (1989) "Science Notes - Recombinant DNA Simulation," *Iowa Science Teachers Journal*: Vol. 26: No. 1, Article 11.

Available at: <https://scholarworks.uni.edu/istj/vol26/iss1/11>

This Article is brought to you for free and open access by the IAS Journals & Newsletters at UNI ScholarWorks. It has been accepted for inclusion in Iowa Science Teachers Journal by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Offensive Materials Statement: Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

Recombinant DNA Simulation

In a recent letter to the *ISTJ*, Marshalltown science teacher James J. Hungerford strongly recommended a simulation of recombinant DNA that he found in the April 1987 issue of *The Science Teacher*.

Using Christie L. Jenkins' article, *Recombinant Paper Plasmids* as a guide, Hungerford was able to reproduce the simulation for his students and found that they both enjoyed and learned from the experience.

Geared towards high school students, Jenkins' article offers a laboratory simulation which allows students to create their own recombinant plasmids with paper. "As an introduction to recombinant DNA technology," she explains, "the exercise . . . illustrates and replicates in paper some of the steps of recombinant DNA experiments done in the lab."

In rationalizing the need for this experiment, Jenkins explains that students must understand how recombinant DNA works if they are to understand the issues involved in the use of recombinant DNA.

Bioengineers make news using recombinant DNA techniques in hopes of curing genetic diseases, better understanding cancer, and improving agricultural yields. But while promising much, such techniques have presented and will continue to present society with some very difficult moral and ethical problems. Will our students, as adults, sufficiently understand the issues involved when they are called upon to solve those problems?

(Jenkins, 1987)

Jenkins' article contains both directions for the paper simulation and three handouts with the basic DNA plasmid patterns diagrammed and ready for use by students.

Persons interested in using Jenkins' simulation should refer to the April 1987 issue of *The Science Teacher*. Information regarding copies of the magazine may be requested from *The Science Teacher*, 1742 Connecticut Avenue, NW, Washington, DC 20009.

--S.A.A.